

FIG.1

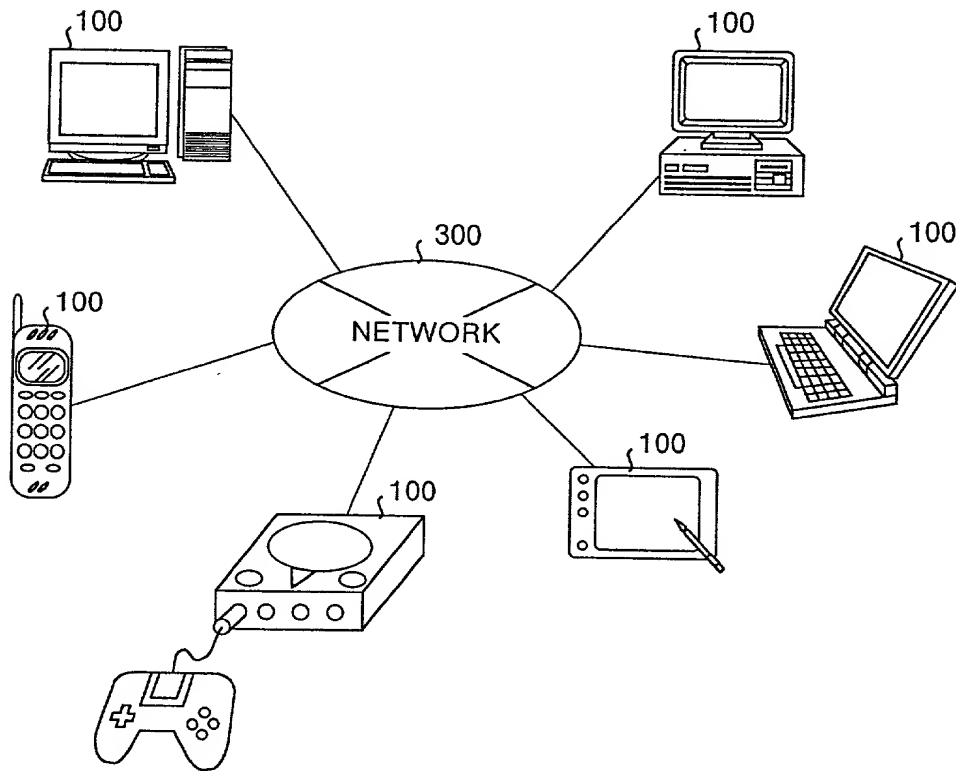


FIG.2

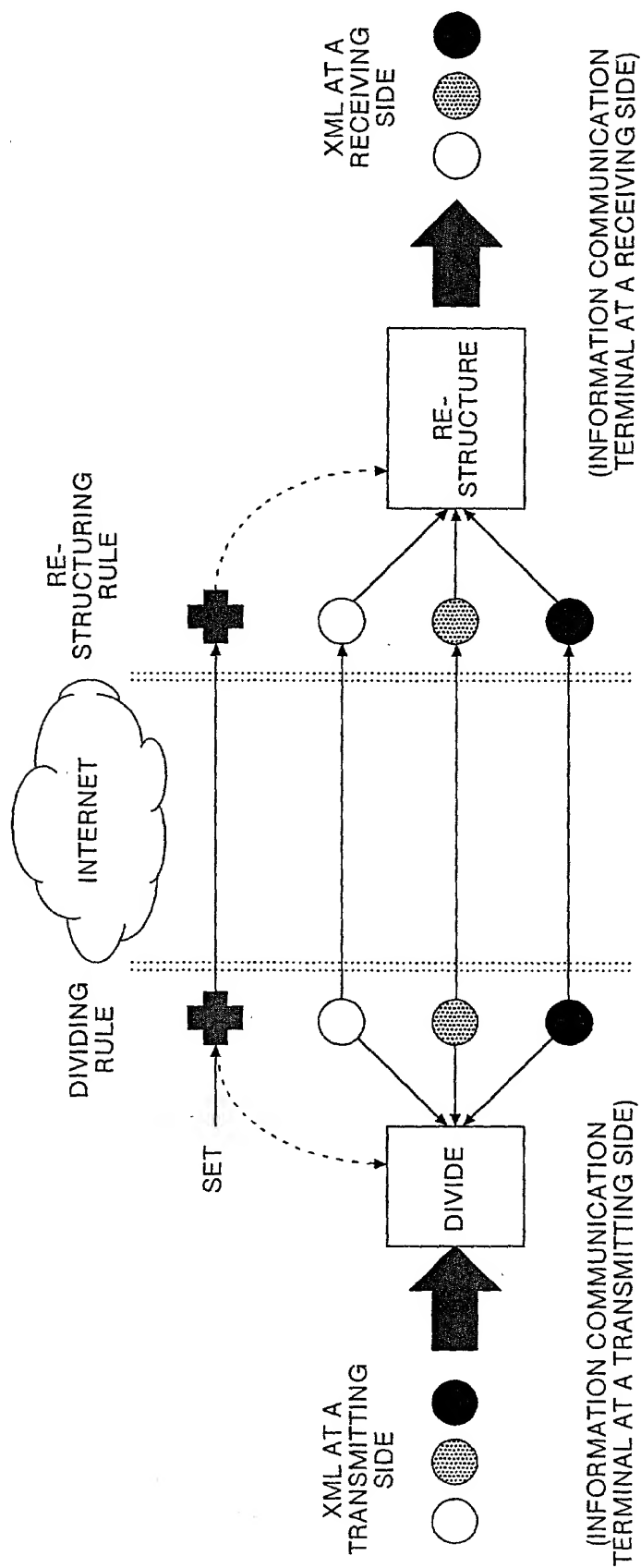


FIG.3

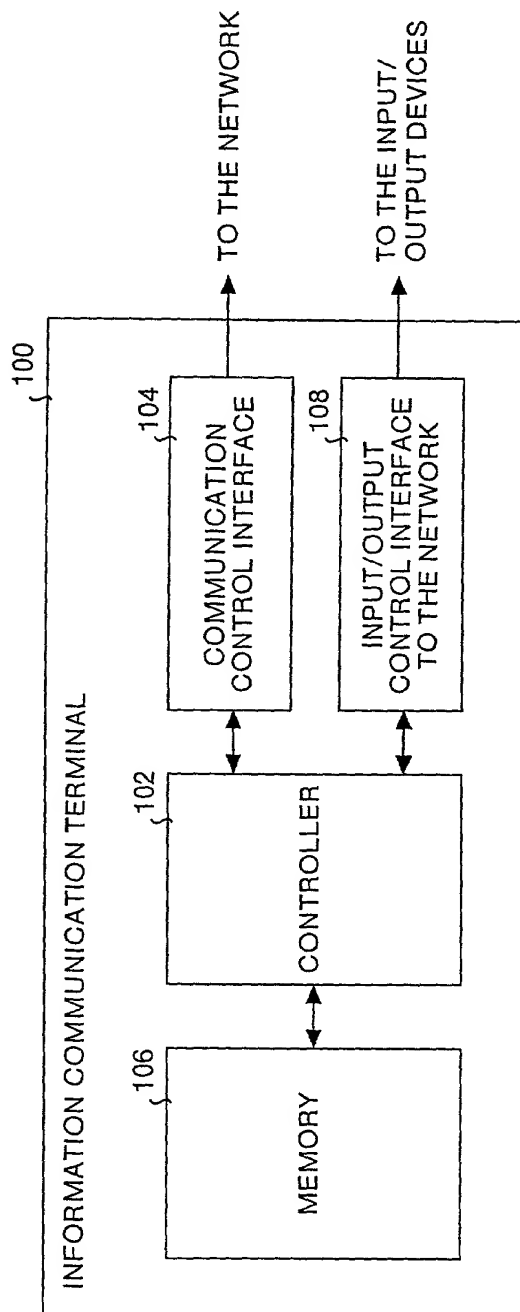
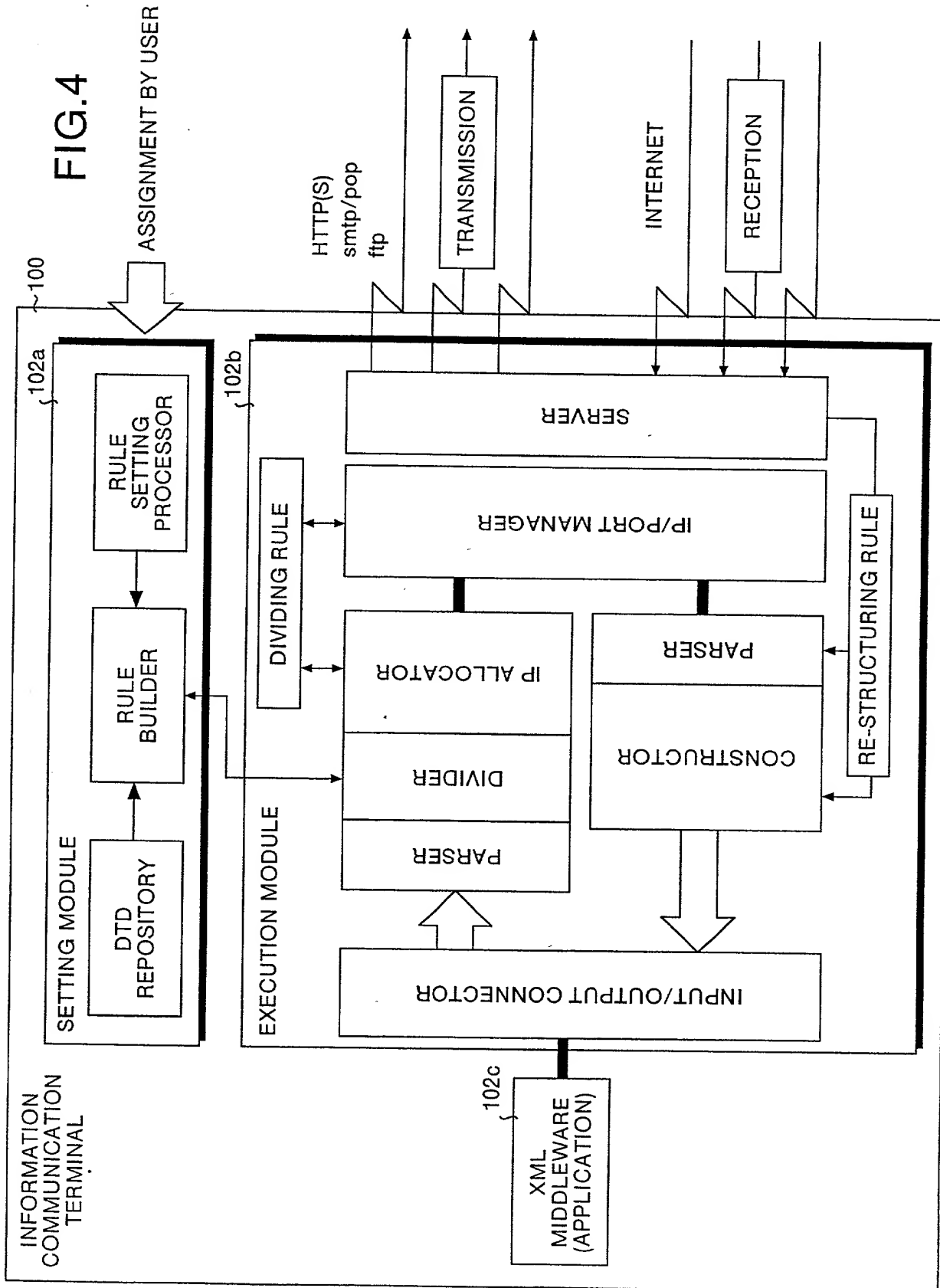


FIG.4



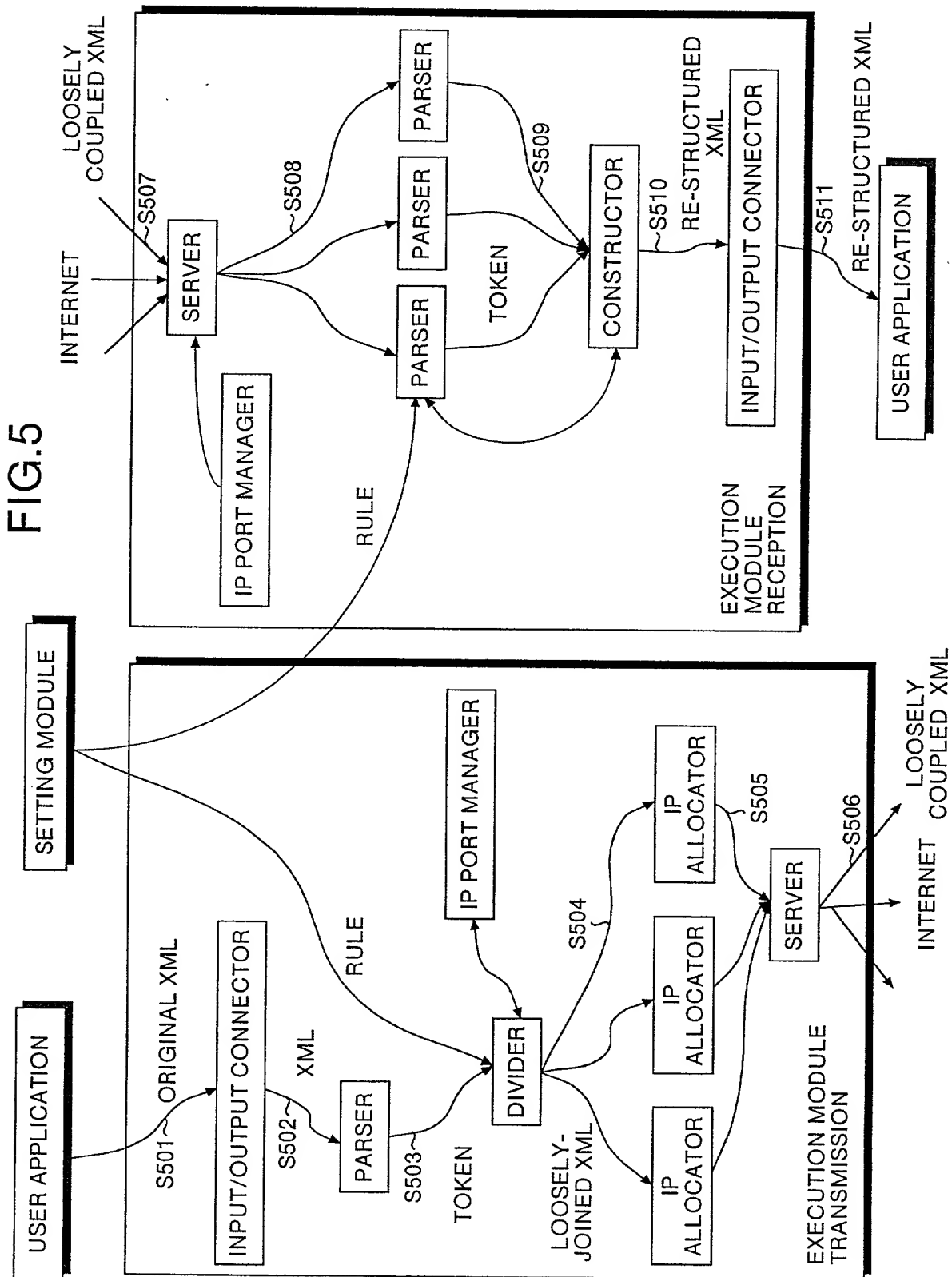


FIG.6

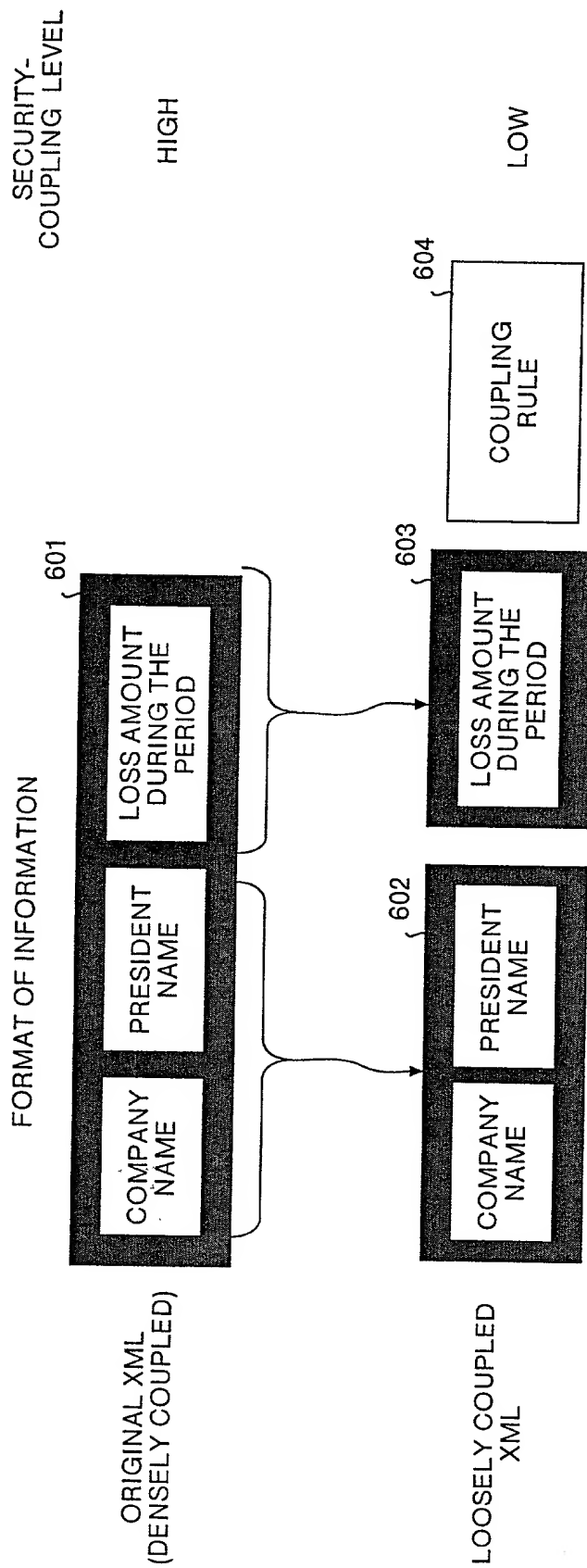
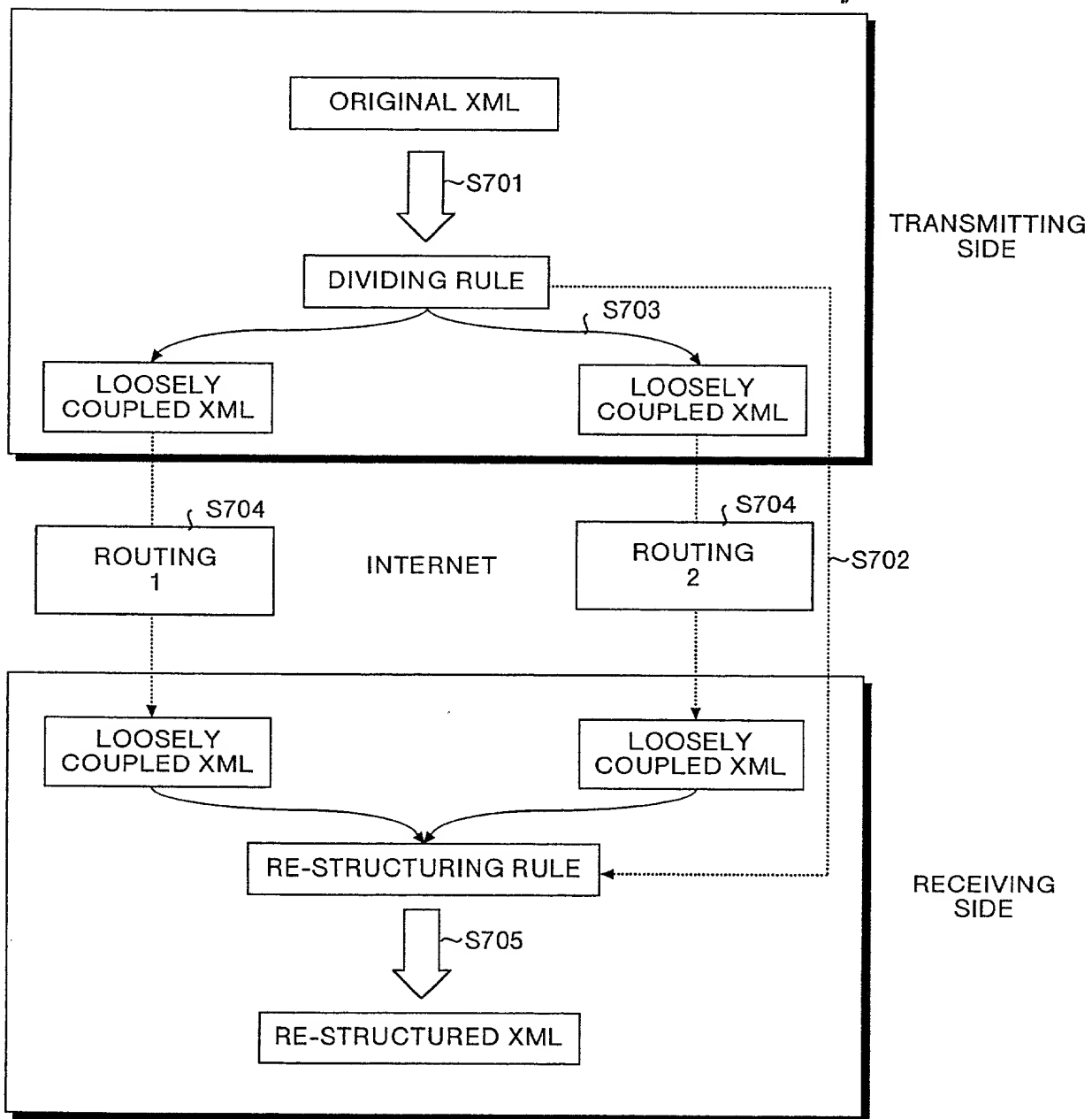
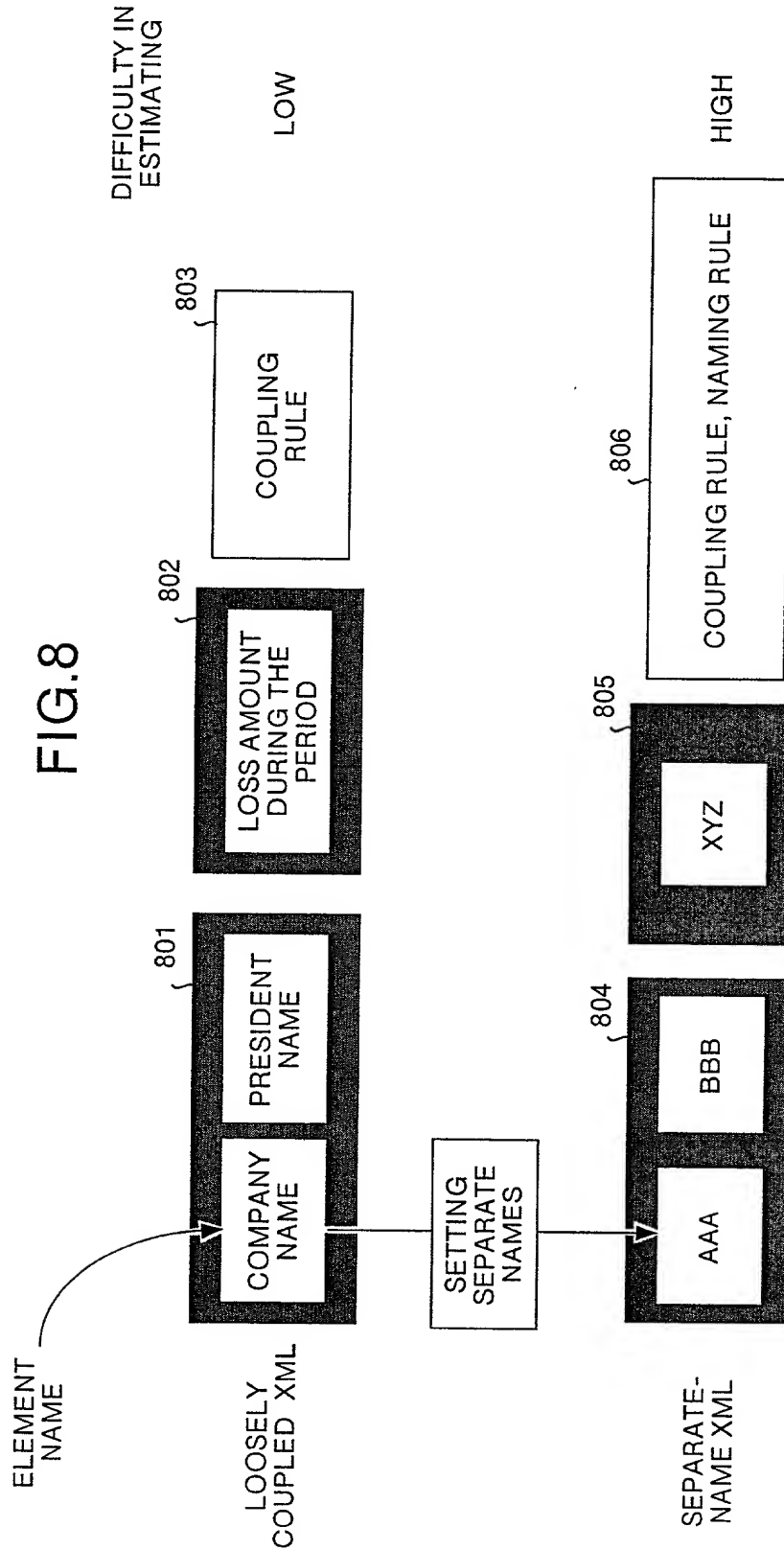


FIG.7





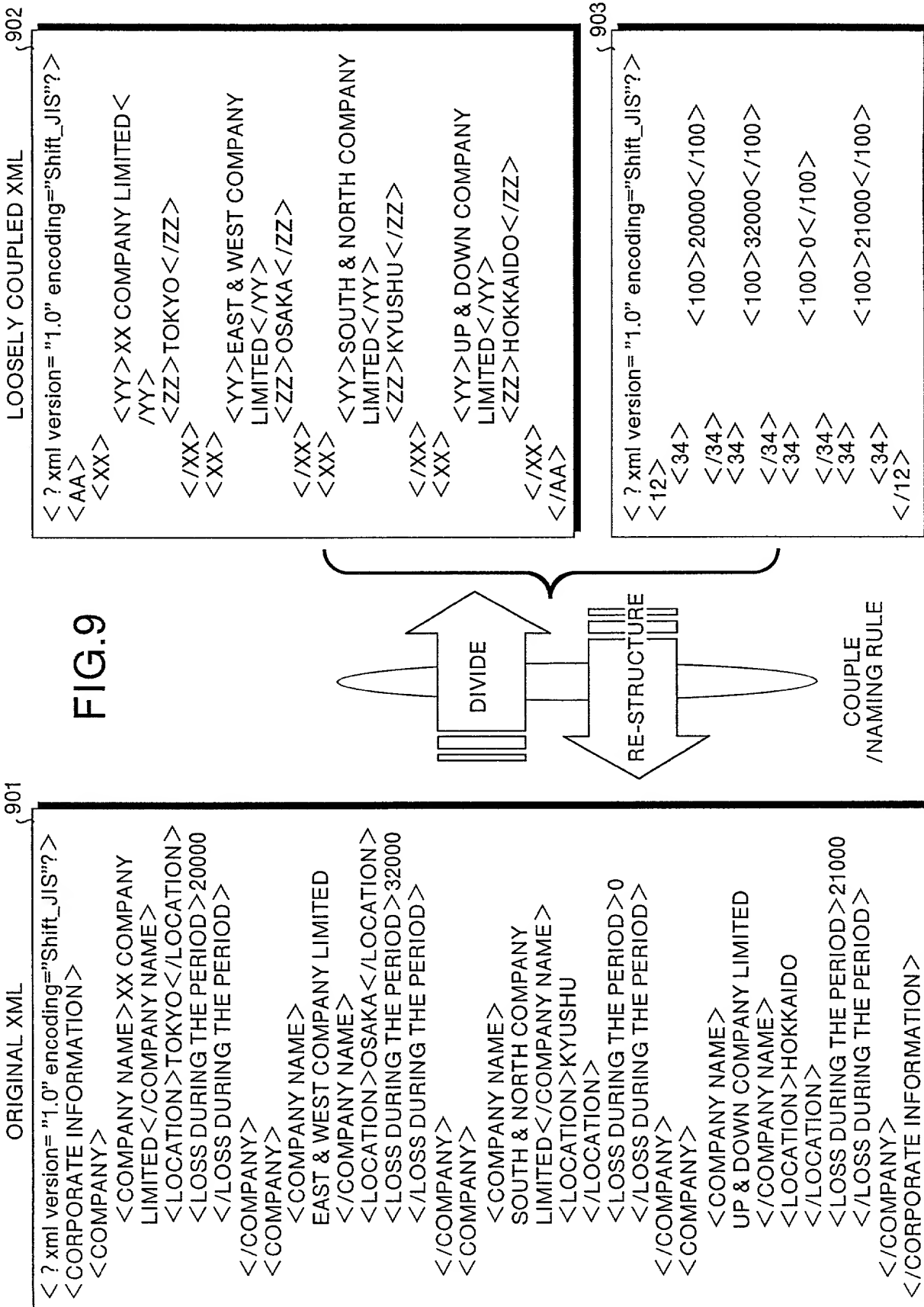


FIG.10

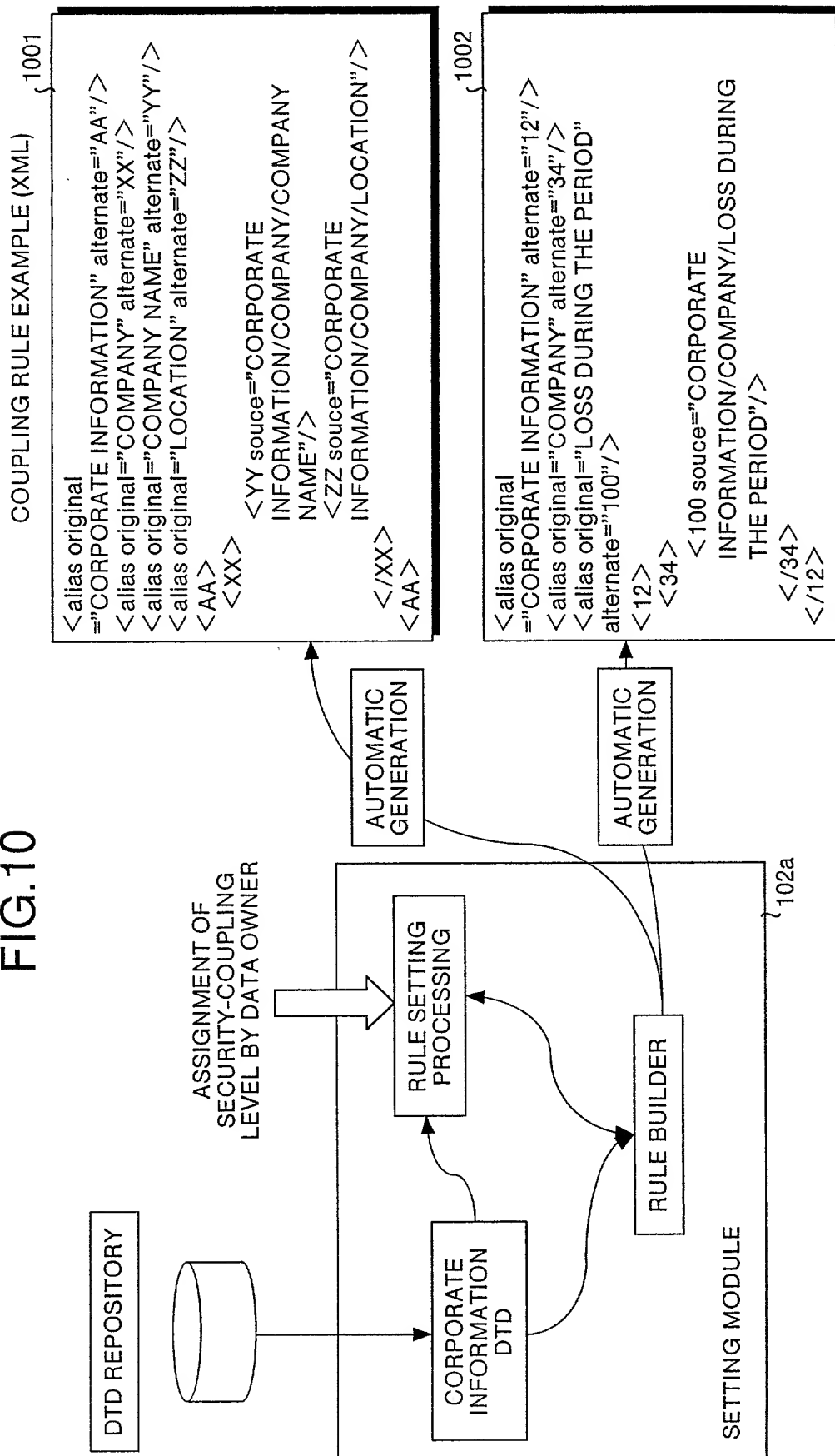


FIG.11

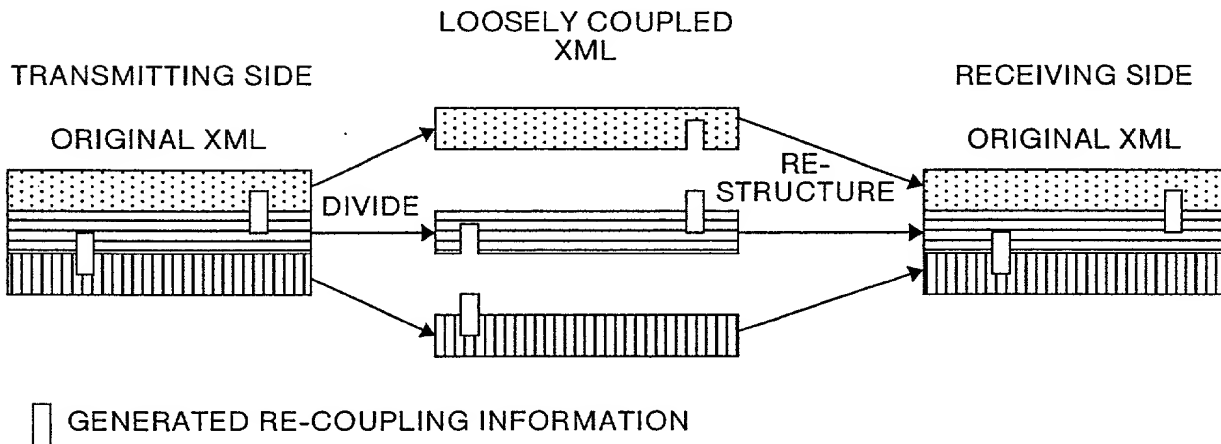


FIG.12

ORIGINAL XML

```
<my-card>
  <card-no>12346789799</card-no>    ---CARD NUMBER
  <password>2345</password>    ----PASSWORD
  <expired>2004/01/01</expired>    ---VALIDITY
</my-card>
```

FIG.13

DIVIDING / RE-STRUCTURING RULE

```
<declare variable="@num" binding="abc/zzz:xyz/hed:mix/ifs"/>
<abc>
  <xxx source="my-card/card-no"/>
    <zzz source="@num=@random(@timeday)"/>
  </abc>
  <xyz>
    <123 source="my-card/password"/>
    <hed source="@num"/>
  </xyz>
  <mix>
    <dsn source="my-card/ expired "/>
    <ifs source="@num"/>
  </mix>
```

FIG.14

LOOSELY-JOINED XML DATA

```
<abc>
  <xxx>12346789799</xxx>      ---CARD NUMBER
  <zzz>gj56a02j</zzz>      --- GENERATED MEDIATION KEY
</abc>
```

```
<xyz>
  <123>2345</123>      ----PASSWORD
  <hed>gj56a02j</hed>      ---MEDIATION KEY
</xyz>
```

```
<mix>
  <dsn>2004/01/01</dsn>      ---VALIDITY
  <ifs>gj56a02j</ifs>      ---MEDIATION KEY
</mix>
```

FIG.15

```
<buffer>
<binding></binding>    MEDIATION KEY FOR COUPLING
<my-card>
  <card-no></card-no>    ---CARD NUMBER
  <password></password>  ----PASSWORD
  <expired></expired>    ---VALIDITY
</my-card>
</buffer>
```

FIG.16

INITIAL STATUS OF BUFFER

```
<buffer>
<binding> </binding>
<my-card>
  <card-no></card-no>    ---CARD NUMBER
  <password></password>  ----PASSWORD
  <expired></expired>    ---VALIDITY
</my-card>
</buffer>
```

FIG.17

ORIGINAL XML DATA OF CARD NUMBER

```
<abc>
  <xxx>12346789799</xxx>      ---CARD NUMBER
  <zzz>gj56a02j</zzz>      --- GENERATED MEDIATION KEY
(RANDOM NUMBER AND THE LIKE)
</abc>
```

FIG.18

SET DATA TO CORRESPONDING
CARD NUMBER ELEMENT IN BUFFER

```
<buffer>
<binding> gj56a02j </binding>
<my-card>
  <card-no>12346789799</card-no>    ---CARD NUMBER
  <password></password>    ----PASSWORD
  <expired></expired>    ---VALIDITY
</my-card>
</buffer>
```

FIG.19

SET DATA TO ALL ELEMENTS

```
<buffer>
<binding> gj56a02j </binding>
<my-card>
  <card-no>12346789799</card-no>    ---CARD NUMBER
  <password>2345</password>    ----PASSWORD
  <expired>2004/01/01</expired>    ---VALIDITY
</my-card>
</buffer>
```